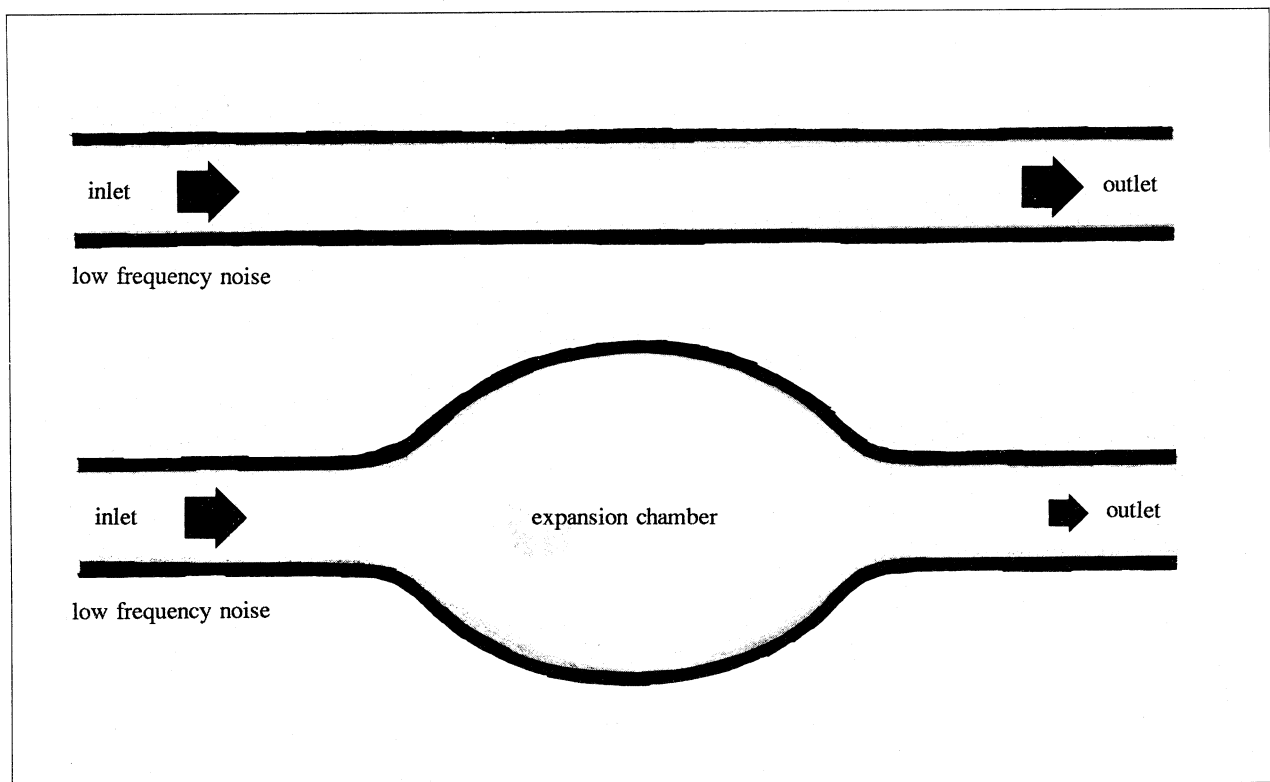


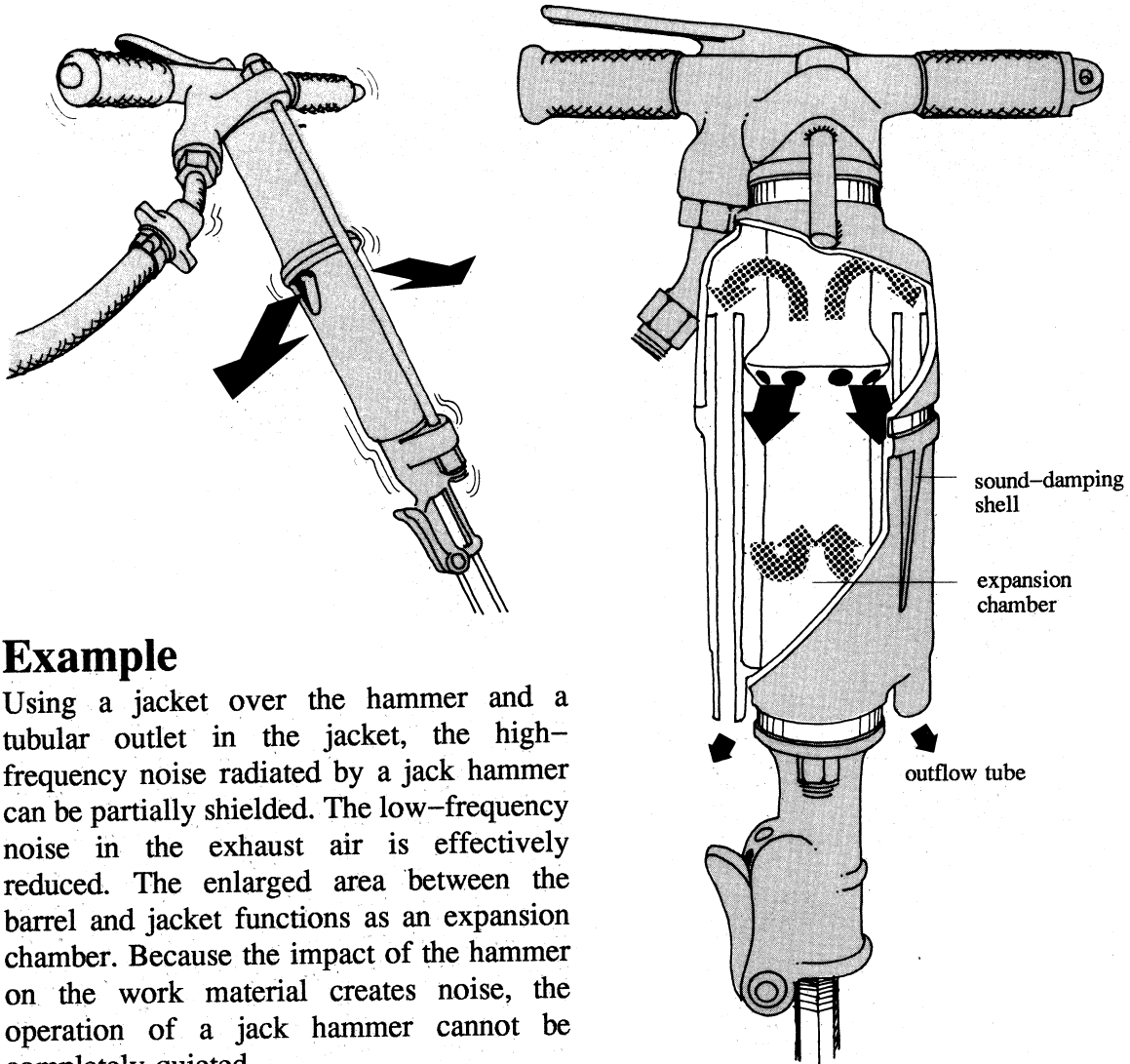
EXPANSION CHAMBERS ARE USEFUL FOR REDUCING LOW-FREQUENCY NOISE

If a duct is provided with an expanded section or chamber, the low-frequency pressure variations in the duct are reduced. The lower the frequency which must be reduced, the greater the volume required in the chamber.

Principle



Application to a jack hammer



Example

Using a jacket over the hammer and a tubular outlet in the jacket, the high-frequency noise radiated by a jack hammer can be partially shielded. The low-frequency noise in the exhaust air is effectively reduced. The enlarged area between the barrel and jacket functions as an expansion chamber. Because the impact of the hammer on the work material creates noise, the operation of a jack hammer cannot be completely quieted.